

Amendments to the Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application:

1. (CURRENTLY AMENDED) A hybrid fiber coax (HFC) network having network elements operable for communicating telephony, data, and video signals with customer-premises equipment of a given subscriber, the HFC network comprising:

a service, design, and inventory (SDI) database operable for storing data indicative of the configuration of the network elements and ~~the~~ customer-premises equipment of subscribers, and for storing data indicative of assigned capacity of the network elements, and for storing data indicative of the physical and logical connections between the network elements themselves and with the customer-premises equipment of the subscribers; and

an online provisioning application link (OPAL) operable with the SDI database to access the stored data for automatically, without manual intervention, provisioning network elements with the customer-premises equipment of ~~the~~ a given subscriber based on the configuration of the network elements and the customer-premises equipment of the given subscriber and based on the assigned capacity of the network elements such that the provisioned network elements and the customer-premises equipment of the given subscriber are physically and logically connected in order to enable communication of telephony, data, and video signals between the HFC network and the customer-premises equipment of the given subscriber;

the SDI database is operable with the OPAL in order to automatically update, without manual intervention, the stored data indicative of the configuration of the network elements and the customer-premise equipment of the subscribers, the assigned capacity of the network elements, and the physical and logical connections between the network elements themselves and with the customer-premises equipment of the subscribers to account for the automated provisioning of the provisioned network elements with the customer-premises equipment of the given subscriber.

2. (ORIGINAL) The HFC network of claim 1 further comprising:

an HFC network manager for monitoring status of the network elements and the customer-premises equipment, for controlling configuration of the network elements and the customer-premises equipment, and for monitoring the configuration of the network elements and the customer-premises equipment.

3. (CURRENTLY AMENDED) The broadband network of claim 2 further comprising:

a fault manager having an alarm visualization tool operable with the HFC network manager and the SDI database for generating visual displays of the status and configuration of the network elements and the customer-premises equipment of the ~~subscriber~~ subscribers.

4. (CURRENTLY AMENDED) The ~~broadband~~ HFC network of claim 3 further comprising:

a trouble ticket system operable with at least one of the HFC network manager and the fault manager for generating trouble ticket alerts in response to improper status of at least one of the network elements and the customer-premises equipment.

5. (ORIGINAL) The HFC network of claim 4 wherein:
the HFC network manager updates the improper status of the at least one of the network elements and the customer-premises equipment to a proper status after the trouble ticket alert has been addressed.

6. (ORIGINAL) The HFC network of claim 3 further comprising:
a trouble ticket system operable with at least one of the HFC network manager and the fault manager for generating trouble ticket alerts in response to improper configuration of at least one of the network elements and the customer-premises equipment.

7. (CURRENTLY AMENDED) The HFC network ~~manager~~ of claim 6 wherein:

the HFC network manager updates the improper status of the at least one of the network elements and the customer-premises equipment to a proper status after the trouble ticket alert has been addressed.

8. (ORIGINAL) The HFC network of claim 1 wherein:

the network elements include a host digital terminal (HDT) for communicating the telephony signals, a cable modem termination system (CMTS) for communicating the data signals, and video equipment for communicating the video signals.

9. (ORIGINAL) The HFC network of claim 8 wherein:

the network elements further include a fiber optics node connected at one end to the HDT, the CMTS, and the video equipment by a fiber optics network and connected at the other end to the customer-premises equipment by coax.

10. (ORIGINAL) The HFC network of claim 1 further comprising:

an order manager operable with the OPAL for monitoring the provisioning of HFC network elements with customer-premises equipment by OPAL.

11-12. (CANCELLED)

13. (CURRENTLY AMENDED) In a broadband network having a hybrid fiber coax (HFC) network provided with network elements operable for communicating telephony, data, and video signals with customer-premises equipment of a given subscriber, an automated method for provisioning HFC network resources comprising:

storing data indicative of the configuration of the network elements and the customer-premises equipment of subscribers in a service, design, and inventory (SDI) database;

storing data indicative of assigned capacity of the network elements in the SDI database; and

storing data indicative of the physical and logical connections between the network elements themselves and with the customer-premises equipment of the subscribers; using an online provisioning application link (OPAL) operable with the SDI database to access the stored data in order to automatically, without manual intervention, provisioning provision network elements with the customer-premises equipment of the a given subscriber by controlling based on the configuration of the network elements and the customer-premises equipment of the given subscriber and based on the data indicative of the assigned capacity of the network elements such that the provisioned network elements and the customer-premises equipment of the given subscriber are physically and logically connected in order to enable communication of telephony, data, and video signals between the HFC network and the customer-premises equipment of a of the given subscriber; and

communicating with the OPAL in order to automatically, without manual intervention, update in the SDI database the stored data indicative of the configuration of the network elements and the customer-premise equipment of the subscribers, the assigned capacity of the network elements, and the physical and logical connections between the network elements themselves and with the customer-premises equipment of the subscribers to account for the automated provisioning of the provisioned network elements with the customer-premises equipment of the given subscriber.

14. (ORIGINAL) The method of claim 13 further comprising:
monitoring status of the network elements and the customer-premises equipment; and
monitoring the configuration of the network elements and the customer-premises equipment.

15. (CURRENTLY AMENDED) The method of claim 14 further comprising:
generating visual displays of the status and configuration of the network elements and the customer-premises equipment of the ~~subscriber~~ subscribers based on the monitored status of the network elements and the customer-premises equipment and the data indicative of the configuration of the network elements and the customer-premises equipment.

16. (ORIGINAL) The method of claim 14 further comprising:
generating trouble ticket alerts in response to improper status of at least one of
the network elements and the customer-premises equipment.

17. (ORIGINAL) The method of 14 further comprising:
generating trouble ticket alerts in response to improper configuration of at least
one of the network elements and the customer-premises equipment.
